

Application No. 10/092,631
Reply to Office Action of May 21, 2004

IN THE CLAIMS

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Please amend the claims as follows:

Claim 1 (Currently Amended): An etched circuit with lightning protection,
comprising:

at least one main line connected to a connector adapted to the an output of the a
transmission antenna of the a transmission system working at a fixed frequency f_0 or in a
narrow frequency band Δf_0 , the circuit comprising around the fixed frequency f_0 :

a capacitor, wherein said circuit comprises

at least one first line, with a first length $[[l_1]]$ and a first width ~~that may or may not be~~
~~constant~~, connected to said connector and terminated by a short circuit that is open-circuited
the main line and substantially equivalent to an open circuit with respect to the main line for
the frequency f_0 .

Claim 2 (Currently Amended): $[[An]]$ The etched circuit with lightning protection
according to ~~the above claim~~, claim 1, further comprising:

a second line, with a second length $[[l_2]]$ and a second width ~~that may or may not be~~
~~constant~~, connected to the output of the capacitor and terminated by a short circuit that is
~~open-circuited~~ main line and substantially equivalent to an open circuit with respect to the
main line for the frequency f_0 ; and

a capacitor arranged on the main line and between the first line and the second line.

Claim 3 (Currently Amended): $[[An]]$ The etched circuit with lightning protection
according to ~~the above claim~~ claim 1, wherein the widths of the first and second lines are
different.

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Claim 4 (Currently Amended): ~~[[An]]~~ The etched circuit with lightning protection according to ~~one of the above claims~~ claim 1, wherein the first line comprises at least one first open stub.

Claim 5 (Currently Amended): ~~[[An]]~~ The etched circuit with lightning protection according to ~~one of the claims 2 to 4~~ claim 4, wherein the second line comprises at least one second open stub.

Claim 6 (Currently Amended): ~~[[An]]~~ The etched circuit with lightning protection according to ~~one of the above claims~~ claim 1, wherein the first length ~~[[l_1]]~~ of the first line ~~and/or the length l_2 of the second line~~ is a quarter of the wavelength of the frequency used f_0 .

Claim 7 (Currently Amended): ~~[[An]]~~ The etched circuit with lightning protection according to ~~one of the above claims~~ claim 1, wherein the width ~~and/or or~~ the length of the first line ~~and/or of the second line and/or of the first stub and/or of the second stub~~ are is determined as a first function of ~~[[the]]~~ a harmonic or harmonics nf_0 , n being an integer greater than or equal to 2, (with n as an integer ≥ 2) to be filtered.

Claim 8 (Canceled).

Claim 9 (Currently Amended): ~~An application of the above identified~~ The etched circuit with lightning protection according to ~~one of the above claims 1 to 7, to the filtering of the claim 7, wherein the function is of a second harmonic $2f_0$ and the or a third harmonic $3f_0$, n being equal to 2 or 3.~~

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Claim 10 (Currently Amended): ~~An application of the method for the manufacture of~~
~~an~~ The etched circuit with lightning protection according to claim [[8]] 7, wherein the
function is to the manufacture of an etched circuit with a common function of lightning
~~protection and of the filtering of one of more harmonics nf_0 , (with n being an integer ≥ 3)~~
greater than 3.

Claim 11 (New): The etched circuit with lightning protection according to claim 6,
wherein the second length of the second line is a quarter of the wavelength of the frequency
used f_0 .

Claim 12 (New): The etched circuit with lightning protection according to claim 7,
wherein the width or the length of the second line is determined as the first or a second
function of a harmonic or harmonics nf_0 , n being greater than or equal to 2, to be filtered.

Claim 13 (New): The etched circuit with lightning protection according to claim 1,
wherein a width or a length of the first stub is determined as a first function of a harmonic or
harmonics nf_0 , n being an integer greater than or equal to 2, to be filtered.

Claim 14 (New): The etched circuit with lightning protection according to claim 13,
wherein a width or a length of the second stub is determined as the first or a second function
of a harmonic or harmonics nf_0 , n being an integer greater than or equal to 2, to be filtered.

Claim 15 (New): A method for the manufacture of the etched circuit with lightning
protection according to one of the claims 1-7 and 9-14, the method comprising:

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etching of the lines of said etched circuit on the base of said etched circuit;
depositing of a film of conductive material;
if necessary, scraping away an excess of the conductive material in order to retain
only the conductive material that has been deposited in the lines and the capacitor.